Abstract

A process for reducing the nitrogen oxides present in a lean exhaust gas from an internal combustion engine by selective catalytic reduction on a reduction catalyst using ammonia, wherein a fraction of the nitrogen monoxide present in the exhaust gas is oxidized to nitrogen dioxide before the exhaust gas, together with ammonia, is passed over the reduction catalyst. The reduction catalyst contains a zeolite exchanged with transition metals and oxidation of the nitrogen monoxide is performed in such a way that the exhaust gas contains 30 to 70 vol.% of mitrogen dioxide before contact with the reduction catalyst.